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PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of: David J. CHAIKO

Date: January 11, 2002

Serial No.: 09/973,302

Atty. Docket No: 051583:0254

Filed: October 9, 2001

#2  
Kuo  
1-31-02

For: **LIQUID CRYSTALLINE COMPOSITES CONTAINING PHYLLOSILICATES**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: U.S. Commissioner of Patents and Trademarks, Washington, D.C. 20231, on January 11, 2002.

Michelle Manning

(Name of applicant, assignee or Registered Representative)

*Michelle Manning*

(Signature)

January 11, 2002

(Date of Signature)

**INFORMATION DISCLOSURE STATEMENT**

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U.S. Commissioner of Patents and Trademarks  
Washington, DC 20231

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TC 1700

Dear Sir:

Submitted herewith on Form PTO-1449 and presented below is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 C.F.R. § 1.56. A copy of each listed document is being submitted to comply with the provisions of 37 C.F.R. §§ 1.97 and 1.98.



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UNITED STATES PATENTS

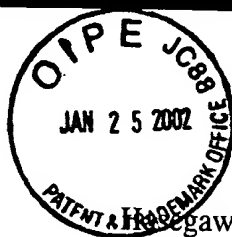
<u>INVENTOR(S)</u>	<u>PATENT NO.</u>	<u>ISSUE DATE</u>
Kawasumi, et al.	4,810,734	Mar. 7, 1989
Beall, et al.	5,552,469	Sep. 3, 1996
Giannelis, et al.	5,554,670	Sep. 10, 1996
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Usuki, et al.	6,103,817	Aug. 15, 2000
Liao, et al.	6,136,908	Oct. 24, 2000
Anderson, et al.	6,156,835	Dec. 5, 2000
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Jordan, John W., "Organophilic Bentonites," *J. Phys. Colloid Chem.*, Vol. 53, pp. 294-306, 1949, published by Baltimore, Williams & Wilkins Co.

Kawasumi, M., et al., "Liquid Crystalline Composite Based on a Clay Mineral," *Mol. Cryst. Liq. Cryst.*, Vol. 281, pp. 91-103, 1996, published by Gordon and Breach Science Publishers SA, printed in Malaysia.

Kawasumi, M., et al., "Preparation and Mechanical Properties of Polypropylene - Clay Hybrids," *Macromolecules*, Vol. 30, pp. 6333-6338, 1997, published by American Chemical Society.



Hasegawa, N., et al., "Preparation and Mechanical Properties of Polypropylene-Clay Hybrids Using a Maleic Anhydride-Modified Polypropylene Oligomer," *J. Appl. Poly. Sci.*, Vol. 67, pp. 87-92, 1998, published by John Wiley & Sons, Inc.

#### REMARKS

The submission of any documents herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 C.F.R. §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie prior art reference against the claims of the present application.

Applicants believe that this Information Disclosure Statement is being submitted prior to the mailing of an Office Action on the merits as set forth in 37 C.F.R. § 1.97(b)(3). Therefore, Applicants believe that no fee is due for this filing. In the event that an Office Action on the merits has been mailed, then Applicants submit this Information Disclosure Statement under 37 C.F.R. § 1.97(c)(2). Should any fee be due, the Patent Office is hereby authorized to charge any fees required for this filing to deposit account no. 06-1447. For the purpose of charging said deposit account, a duplicate of this document is submitted herewith.

It is requested that the foregoing documents be considered during examination of the accompanying application and be made of record therein.



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Respectfully submitted,

Date 01/11/02

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